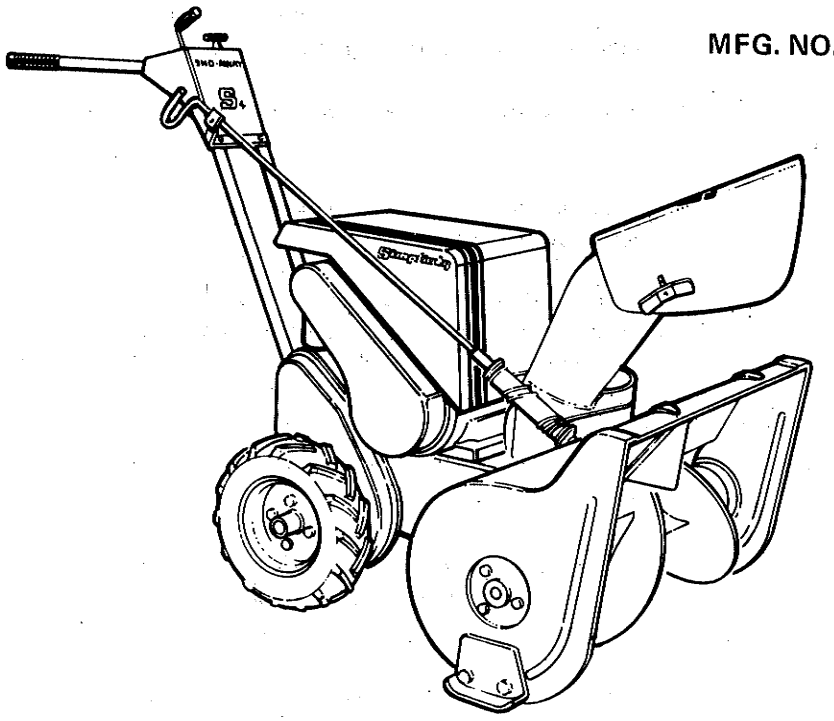
FILE COPY

Simplicity®

SINGLE STAGE
SNO–AWAY
4 H.P.

MFG. NO. 990558



OPERATOR'S MANUAL

SERV. FORM - 1651755
PRINTED IN U.S.A.
744

CONGRATULATIONS!

. . . ON YOUR CHOICE OF SIMPLICITY EQUIPMENT.

This great new product is engineered with imagination and built with integrity to assure you maximum service and performance for years to come. To completely understand the operation of your equipment and to take full advantage of its many fine built-in features, study this instruction manual thoroughly before operating the machine. The little time you spend reading now will repay you many times over in the time you save and the satisfaction you gain in using your equipment properly and safely.

SAFETY FIRST
PROTECT YOURSELF AND OTHERS BY FOLLOWING THESE SAFETY RULES

* **ALWAYS** inspect the area to be worked - note all grades, obstructions, wet spots and other potential hazards and pick up all foreign objects before mowing.

* **ALWAYS** keep children and pets a good, safe distance away.

* **ALWAYS** know your controls and how to stop quickly in an emergency — read the operator's manual thoroughly.

* **NEVER** allow anyone to operate the equipment without full instruction and knowledge of safe operating procedures.

* **NEVER** handle gasoline carelessly. Use an approved container and fill the tank out of doors. Wipe up spilled gasoline. Do not smoke while fueling the engine.

* **NEVER** add gasoline to a running engine. Stop engine and allow it to cool a few minutes before adding fuel. Replace filler cap securely.

* **NEVER** operate equipment unless all guards and shields are in place.

* **ALWAYS** keep hands, feet and clothing away from power driven parts.

* **ALWAYS** disengage the power take off drives, stop the engine, and remove the key (on electric start models) before leaving the machine even if only for a moment.

* **ALWAYS** stop the engine before servicing or adjusting machine or equipment. Remove the spark plug wire on walk behind mowers.

* **ALWAYS** stop the engine and inspect for damage immediately after striking an obstruction or foreign object. Repair damage before restarting.

* **NEVER** overspeed the engine or alter governor settings. Excessive speed is always unsafe and shortens engine life.

* **ALWAYS** properly maintain the equipment. Check all fasteners, guards and parts.

* **ALWAYS** stop the engine on walk behind units or disengage the blade drive and raise the mower on riding units before crossing gravel drives.

* Do not operate the engine where carbon monoxide can collect.

In addition to the basic safety rules above, follow these snow removal tips.

Always direct the snow discharge so that it does not blow back toward you. Constant inhalation of cold, wet vapor is extremely injurious. On windy days, have your nose and mouth well covered.

Adjust the skid shoes to clear gravel or crushed rock surfaces.

Never direct discharge at by-standers or allow anyone in front of the machine - debris may be hidden in the snow.

Use caution to avoid slipping or falling, especially when moving in reverse.

Disengage the drives and stop the engine before cleaning the discharge chute, removing obstacles, making adjustments or when leaving the operating position.

BUILT IN SAFETY FEATURES CAN BE EFFECTIVE ONLY IF PROPERLY MAINTAINED AND UTILIZED.

SIMPLICITY'S NEW EQUIPMENT WARRANTY

The Company warrants Simplicity products to be free from defects in material and workmanship, except the Company makes no warranty, express or implied, with respect to tires, engines, generators and voltage regulators, which are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year (45 days for equipment used for rental, municipal or commercial purposes) under normal use, from date of purchase, will be replaced without charge, provided such part is returned to the factory, (if requested), and is found to be defective upon examination at the factory. This warranty does not apply to any Simplicity products altered outside of the Simplicity factory. THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, PERFORMANCE, OR OTHERWISE. The Company's obligation under its warranty is strictly and exclusively limited to the replacement of such parts, and in no event shall the Company be liable for any other damages, whether direct, immediate, incidental, special, or consequential. Simplicity Manufacturing Company, Inc., reserves the right to modify or change specifications without prior notification. There are no warranties which extend beyond the description of any Simplicity product.

TABLE OF CONTENTS

	Page
SAFETY PRECAUTIONS	Inside Cover
WARRANTY	1
ACCESSORIES	2
ASSEMBLY	2
PREPARING SNO-AWAY FOR OPERATION	6
OPERATING YOUR SNO-AWAY	8
ORGANIZING THE JOB	8
TRANSPORTING	8
STORAGE	9
TROUBLESHOOTING	9
ADJUSTMENTS	9
MAINTENANCE	10
DECALS	11
SPECIFICATIONS	12

PARTS LISTINGS

ROTOR BODY AND FRAME	14
HANDLES AND CONTROLS	16
TRANSMISSION AND WHEELS	18
SHIELDS, DRIVE PULLEYS, AND ENGINE	20
SPOUT GROUP	21

ACCESSORIES

Your dealer can furnish these accessories to increase the convenience and usefulness of your Sno-Away.

TIRE CHAINS - MFGS. NO. 2025053. The chevron tread tires on your Sno-Away are self cleaning and will propel the machine under most conditions.

Tire chains will greatly increase the traction on icy surfaces or if steep grades must be climbed. Chains should be used with caution on black top to avoid marking the surface.

SNOW CAB - MFG. NO. 990877. The shelter provided by this cab will greatly increase operator comfort in severe weather and blowing snow.

ASSEMBLY

1. Remove tape securing throttle control cable to right handle. See Figure 1.

2. Attach handle assemblies to frame, rotor, engine, and wheel assembly with four hex capscrews, flat washers, lockwasher, and hex nuts.

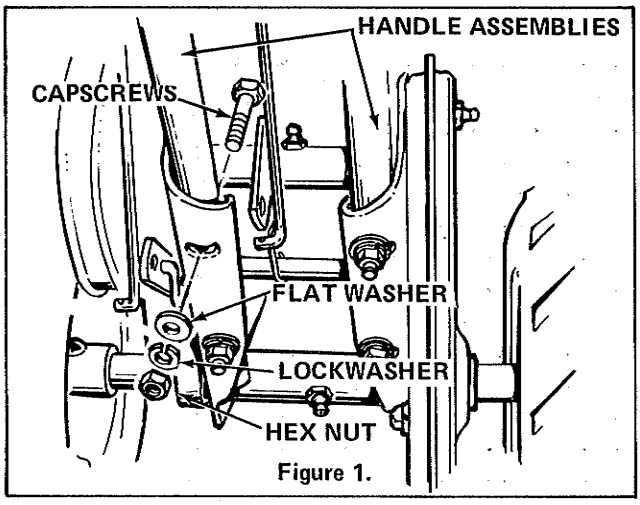
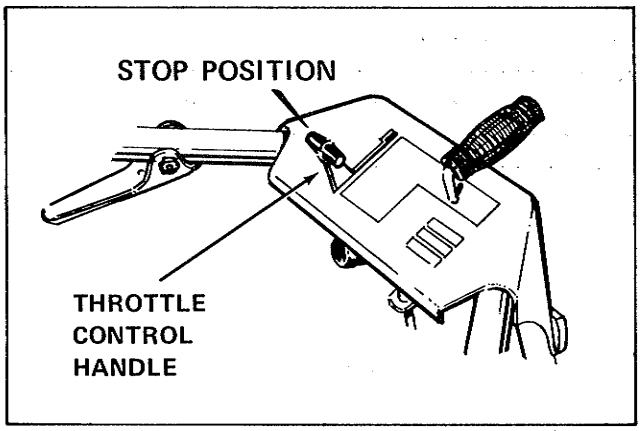


Figure 1.

3. See Figure 2. Place throttle control handle in stop position and secure loose end of throttle cable as shown.



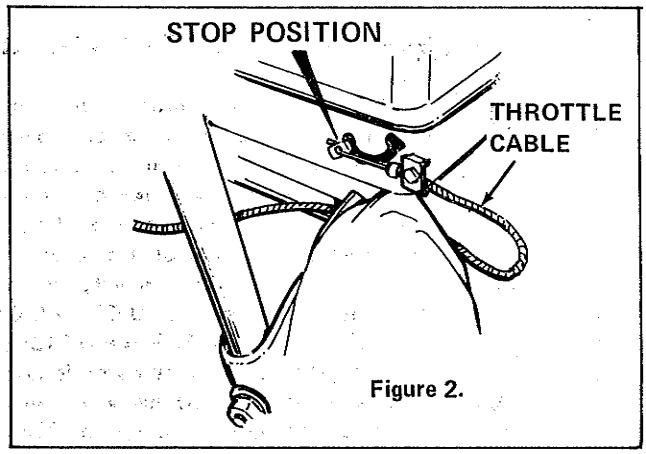


Figure 2.

4. See Figure 3. Attach support bracket to control panel with hex nut, lockwasher and capscrew. Secure spout control rod assembly to bracket as illustrated.

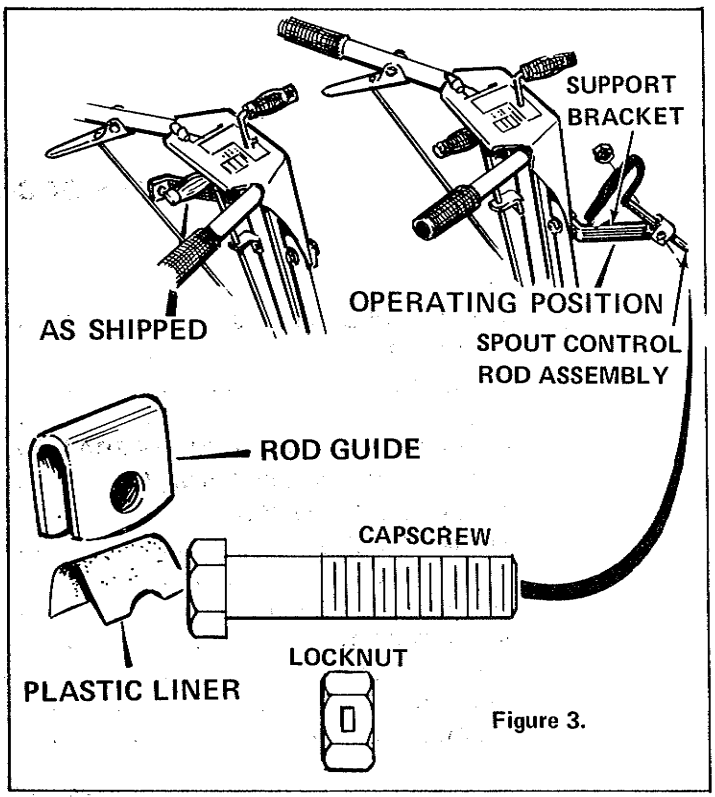


Figure 3.

5. See Figure 4. Place liner on frame outlet and spout on liner.

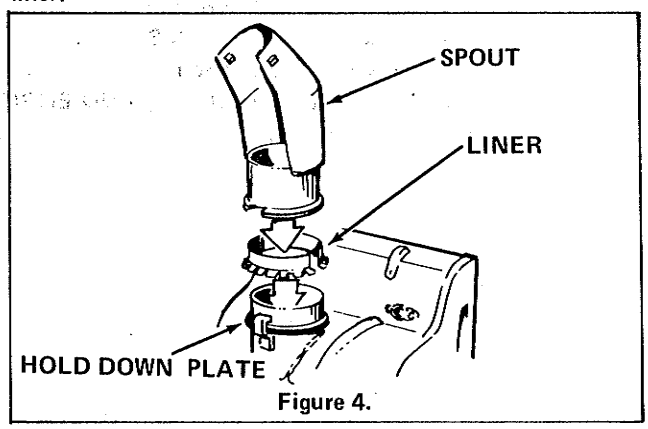


Figure 4.

6. See Figure 5. Attach spout extension to spout with wing nut, flat washer, pyramidal lockwasher and carriage bolt.

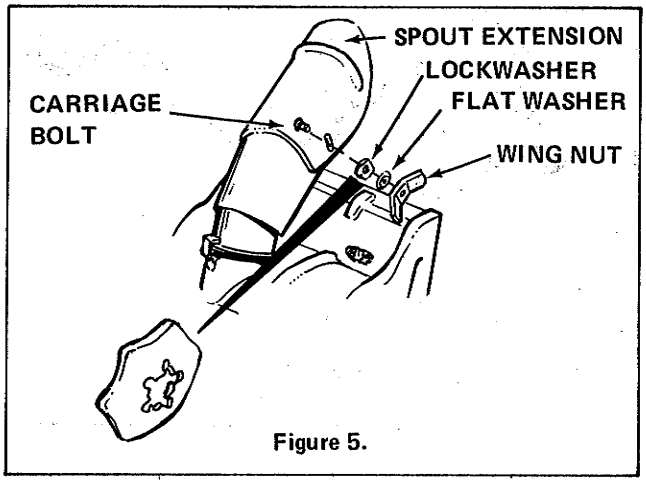


Figure 5.

7. See Figure 6. Insert spout control rod assembly into bearing and secure in place with a cotter pin above and a cotter pin below bearing.

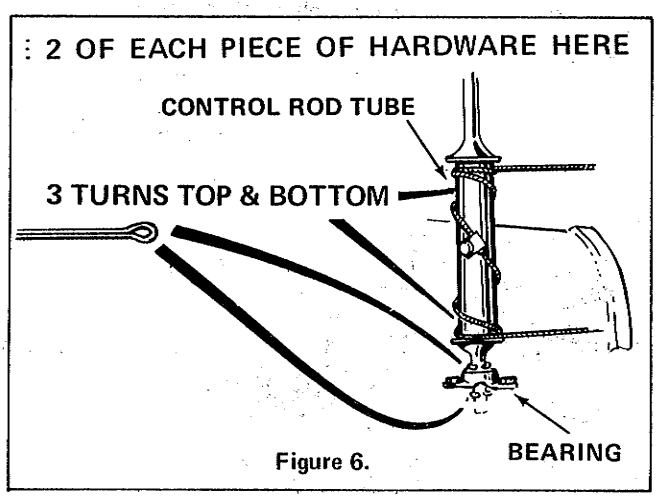


Figure 6.

8. See Figure 7. Secure one end of cable to carriage bolt as illustrated. Wind remaining cable three turns around control rod tube, through clamp, three times around to end of tube and back to carriage bolt. Secure both ends of cable with wing nut and attaching parts (See Figure 5). Be sure clamp is secure on control rod tube and upper portion of rod is secure to support bracket.

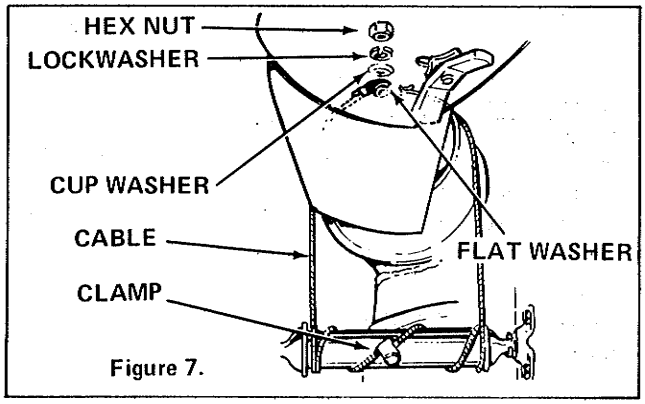


Figure 7.

9. See Figure 8. Secure upper and lower spring assembly wires together with wire clamp and round-head screw. Pull down on upper wire until there are 3 to 3-¼ inches from the end of the top wire to the clamp. Further adjustment may be necessary

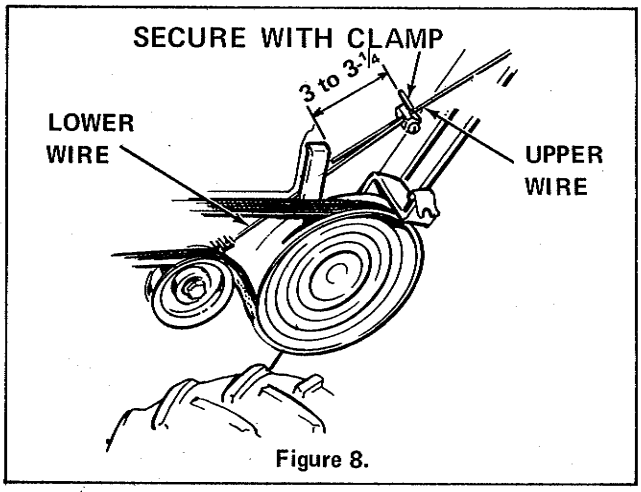


Figure 8.

10. See Figure 9. Attach auger and transmission control rods with a cotter pin each.

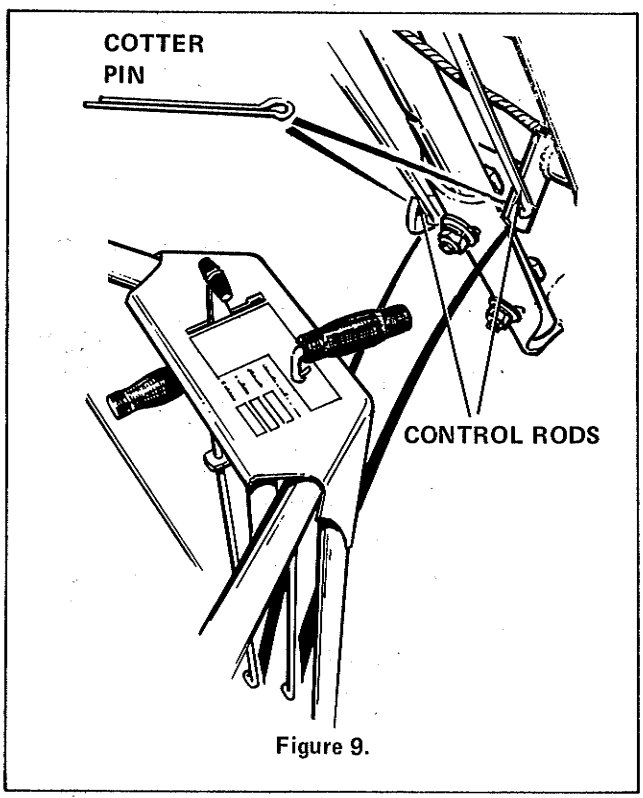


Figure 9.

11. See Figure 10. Secure both skids to frame with carriage bolts, lockwashers, flat washers and hex nut. Carriage bolts must be on inside of frame. See Adjustments Section for skid height.

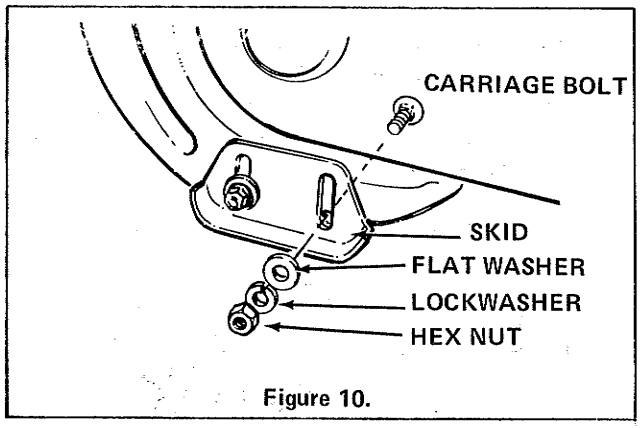
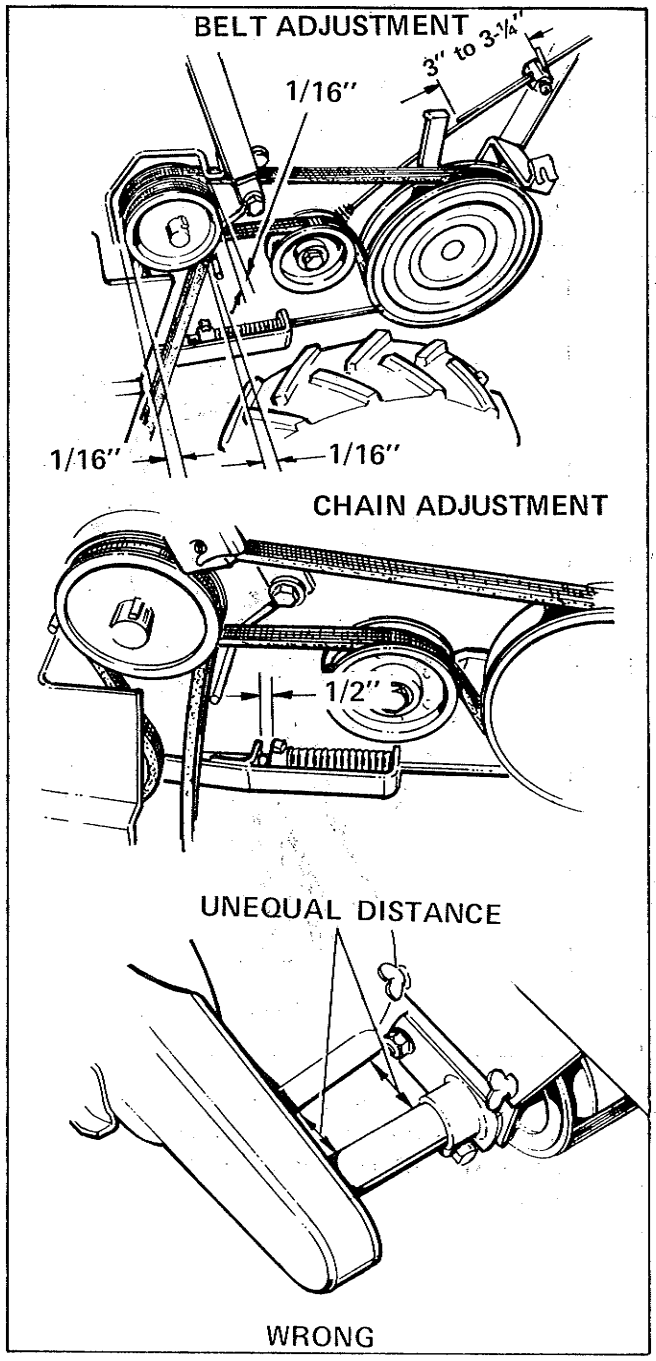


Figure 10.

12. See Figure 11. Adjust belt chains and belts as instructed in the illustration.



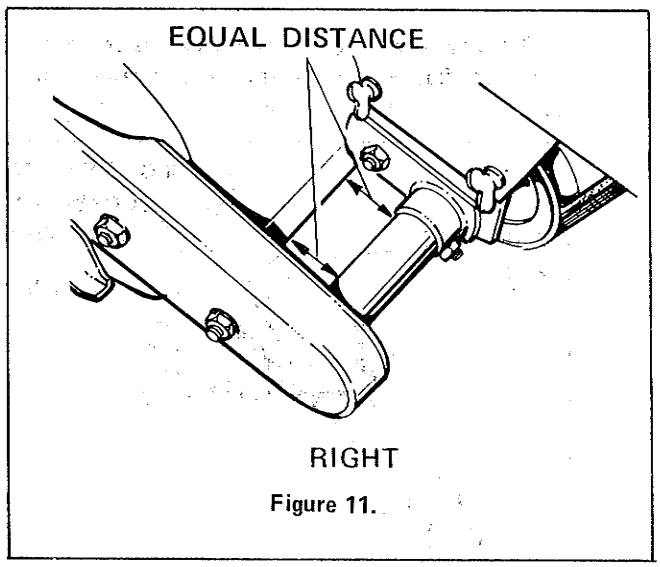


Figure 11.

Visualize yourself standing at the operators position by looking at Figure 1. Before starting the engine let's learn how you can use these controls. (The numbers on the figure correspond to the paragraph numbers below.)

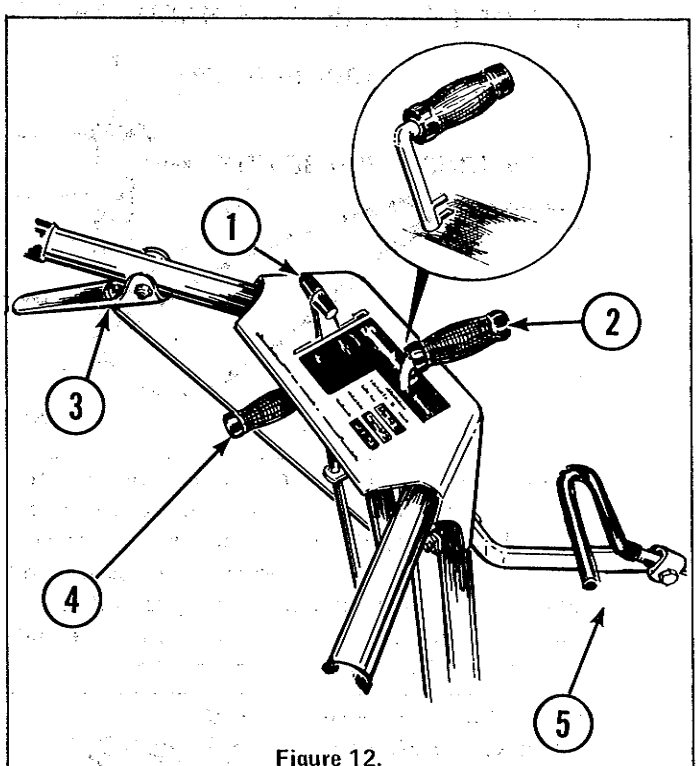


Figure 12.

1. THE THROTTLE CONTROL - is the most convenient way to control throwing distance. It also can be used to control speed over the ground. Push it forward to increase throwing distance (up to 30') and ground speed up to 1.39 MPH. PULL IT ALL OF THE WAY BACK TO STOP THE ENGINE. The control is freeze proof so it always works. Set it at the lowest speed for satisfactory throwing distance - there will be much less powdery snow in the air.

2. THE TRANSMISSION DIRECTION CONTROL has three positions - down for forward, up for reverse, and centered for neutral. Figure 12 shows the pin in the handle and key hole slot in the panel provide positive stopping in neutral from either forward or reverse. The Clutch grip must be released before shifting.

FORWARD - Rotate the handle toward your left and push all of the way down.

NEUTRAL - From Forward, rotate the handle toward your right and pull it up against the stop.

REVERSE - Rotate the handle toward your left and pull it all of the way up.

NEUTRAL - From Reverse, rotate the handle toward your right and push the shift rod down against the top of the control housing.

NOTE

It may be necessary occasionally to squeeze the clutch grip momentarily and release it before the shift lever will travel fully into forward or reverse.

SHUTTLE SHIFTING - From forward to reverse and vice-versa - hold the handle rotated to your left and move it all of the way up or down - remember the Clutch grip must be released while shifting.

3. THE CLUTCH GRIP is a safety feature. If you should slip and fall, your hand comes off the trigger and the Sno-Away stops instantly in either forward or reverse.

Rest your left hand on the handle and squeeze the grip upward gently to start travel. Squeezing it further upward increases the travel speed. This control should be used to adjust travel speed so that the engine speed control can be used to control throwing distance.

The Clutch grip should also be used for inching into heavy drifts - it is designed to withstand slipping.

4. THE AUGER CONTROL LEVER starts and stops the auger rotation independently of any other drive. Your Sno-Away is one of the few snow throwers which lets you run the traction drive without running the auger.

The speed control lever should be at least half way forward before engaging the auger drive.

Pull the lever all of the way up to run the auger. Push down to stop the auger. NOTE: your Sno-Away should always be operated with this drive either fully engaged or fully disengaged. (All of the way up or down).

5. THE DISCHARGE SPOUT CONTROL is an exclusive design using aircraft cable and a "T" handle rod. You can break loose a frozen Sno-Away spout by rotating the "T" handle.

Rotate the handle clockwise (top to the right) to discharge snow to the right. Throw snow down wind wherever possible to keep airborne snow away from you.

ALL OF THE CONTROLS WE HAVE JUST DISCUSSED ARE FOR USE WHILE YOUR SNO-AWAY IS IN OPERATION.

There are two other controls and an adjustment for added convenience which must BE ADJUSTED ONLY WITH THE MACHINE STOPPED. Let's go to the front of the Sno-Away by looking at Figure 13.

6. THE CHUTE DEFLECTOR POSITION can be adjusted by loosening the wing nuts and moving the deflector up or down. Be sure to tighten both wing nuts after positioning the deflector. Hold the rear of the deflector down while tightening the wing nuts to make sure that all of the snow goes out of the chute.

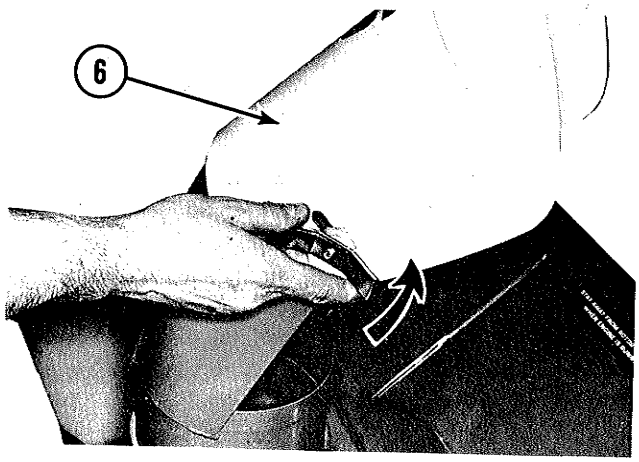


Figure 13.

This deflector position supplements the engine speed control to control throwing distance. The highest position provides the greatest throwing distance. Most snow moving can be done with the deflector all of the way up by using the engine speed lever to control the throwing distance.

Now let's go to the left side of the machine by looking at Figure 14.

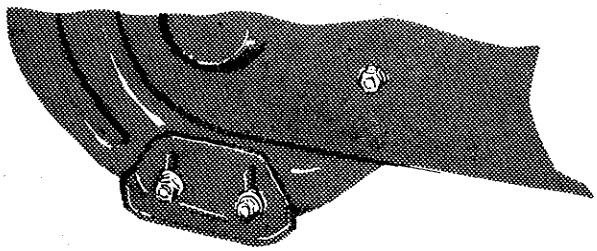


Figure 14.

7. SKID SHOE ADJUSTMENT While we are at the front of the Sno-Away, let's check the skid shoe adjustment. Your Sno-Away has hardened steel adjustable skid shoes. Their larke area supports the front of the Sno-Away above even a gravel surface. (Small area rollers sink into the gravel).

GRAVEL SURFACE USE ADJUSTMENT

If you will be clearing a gravel surface loosen the nuts, see Figure 14 raise the front of the Sno-Away and drop the skid shoes all of the way down. Set the bottom surface of the skid shoes so they are level or slightly (maximum of 1/8") higher in the front and tighten the nuts securely. Repeat these steps for the skid shoe on the other side. Check to make sure that with the Sno-Away resting on the skid shoes and the wheels, that the skid shoes are even with each other. The Sno-Away will now be supported on the skid shoes so the scraper bar can skim the snow from the surface and leave the stones on your driveway instead of throwing them on your lawn.

HARD SURFACE USE ADJUSTMENT

Loosen the nuts and rest the Sno-Away on a hard level surface. The Sno-Away should now be supported on the tires, and skid shoes with the scraper bar resting on the surface. Tighten the nuts on both skid shoes taking care that their position doesn't change while the nuts are tightened. The full width scraper bar on your Sno-Away will now get down to "bed rock" and leave the surface clean.

8. THE TRACTION DRIVE LOCK PLATE is a convenience feature missing from most 4 HP Snow Throwers but it is on your Sno-Away. Solid axle traction (both wheels driving) propels the Sno-Away straight ahead through uneven snow with just guiding pressure on the handles. The Sno-Away should always be operated with this plate in the locked position. It is quite easy to turn the Sno-Away on a wet or snowy surface with the wheels locked. Turning it on a dry garage floor while storing it is very difficult unless the wheel is unlocked.

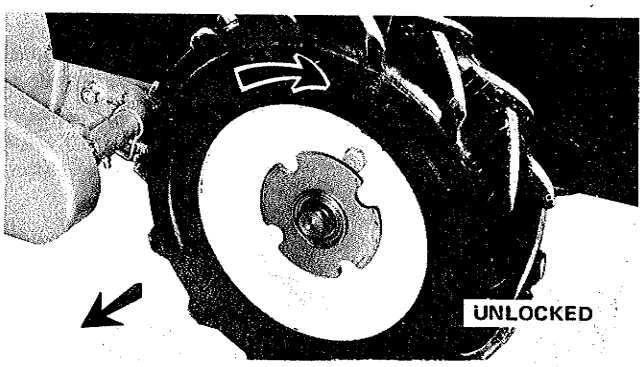


Figure 15.

TO RELEASE THE LOCK PLATE so that the wheels can rotate independently, grasp the lock plate and pull it toward you, as far as it goes. NOTE: It may be necessary to push the Sno-Away back and forth slightly to pull the plate out of engagement with the pins. Now rotate the plate in either direction until the solid area of the plate rests against the pins. The plate will stay out and the Sno-Away can be turned easily.

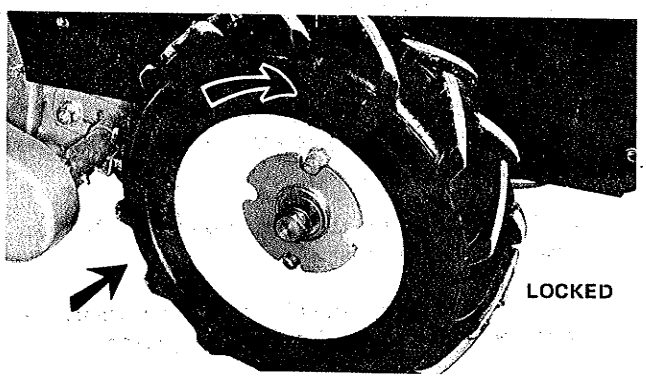


Figure 16.

TO LOCK THE PLATE IN THE DRIVING POSITION just rotate it until the pins line up with the holes - a spring will snap it into the drive position. NOTE: On occasion the Sno-Away will have to move a short distance before the lock plate will fully engage the axle.

PREPARING YOUR SNO-AWAY FOR OPERATION

If your dealer has not already filled the engine crankcase with oil, proceed as follows:

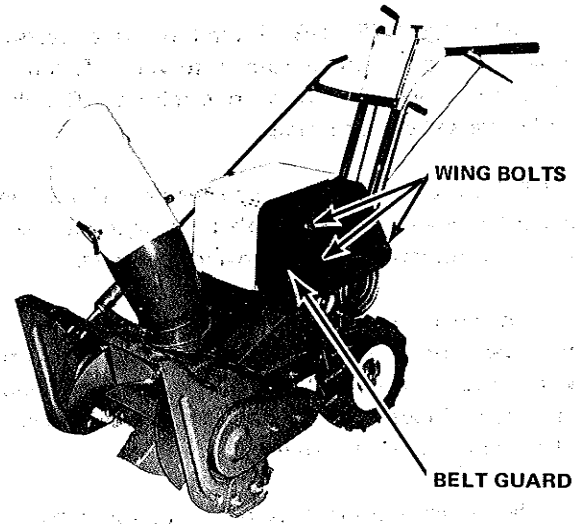


Figure 17.

1. Remove the three wing bolts, and the belt guard shown in the picture above.

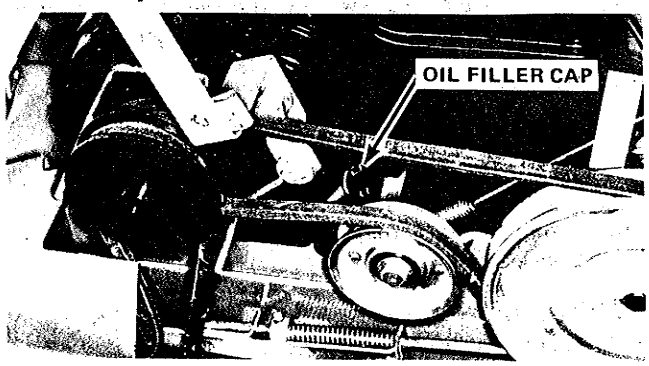


Figure 18.

2. Remove the crankcase oil filler cap shown in this picture and fill the crankcase with 5W20 grade M.S. oil - level with the top of the filler neck.

3. Re-install the filler cap - tighten it securely.

4. Re-install the belt guard and the 3 wing screws- tighten them securely.

NOTE: The oil level should be checked and oil should be added if necessary to bring the oil level with the top of the filler neck every other time you fill the Sno-Away with gasoline.

CAUTION

Never start or operate the Sno-Away without all covers, or shields in place.

5. Remove the fuel tank filler cap and fill the tank completely with clean, fresh "Regular" grade gasoline. DO NOT MIX OIL WITH GASOLINE.

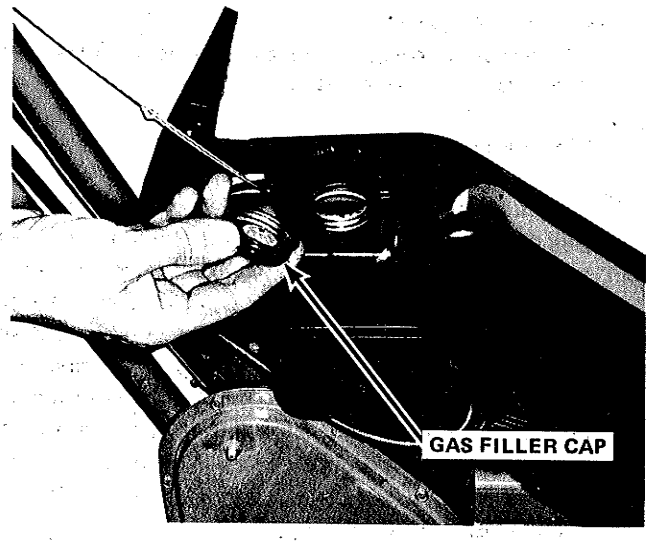


Figure 19.

CAUTION

GASOLINE IS HIGHLY INFLAMMABLE. AVOID OVER-FILLING AND WIPE UP ANY SPILLED FUEL. ALLOW NO OPEN FLAME, SMOKING OR MATCHES NEAR THE AREA WHEN REFUELING. ALLOW THE ENGINE TO COOL SEVERAL MINUTES BEFORE ADDING FUEL

Replace the filler cap securely. Store gasoline in small quantities - prolonged storage produces harmful gum and deposits.

Now you are ready to start the Sno-Away.

CAUTION: CONCENTRATED EXHAUST GAS IS POISONOUS

Always push the Sno-Away out of doors or open the garage door fully before starting the engine.

The paragraph numbers match the numbers identifying the controls in this picture.

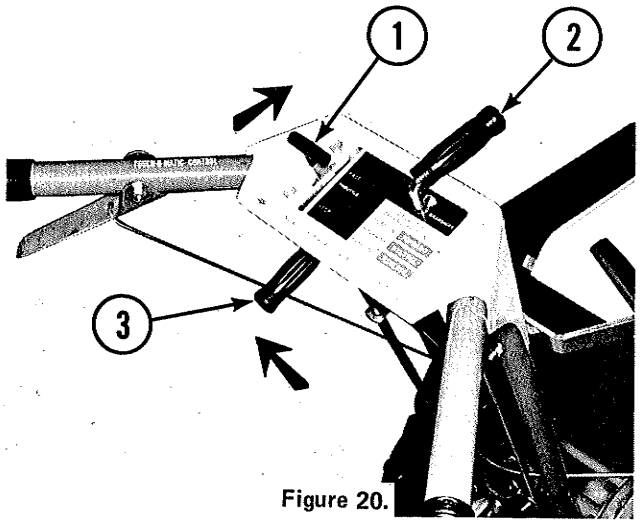


Figure 20.

1. Set the engine speed control lever at the center of this travel.

2. Place the transmission control lever in neutral.

3. Push the auger drive control all of the way down.

4. Pull the choke plunger all of the way out.

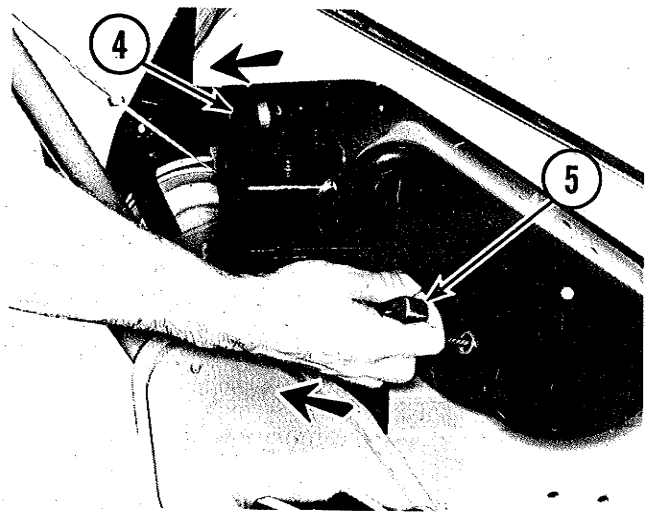


Figure 21.

5. Stand behind the handles, grasp the recoil starter handle firmly in your right hand and pull sharply straight back. The engine should start after a few pulls. After the engine starts, push the choke plunger in slowly.

If the engine fails to start after 4 or 5 pulls, it may be "flooded". Push the choke all of the way in, and crank the engine 4 or 5 times to clear the excess fuel.

Let the engine warm up about a minute before using the Sno-Away.

OPERATING YOUR SNO-AWAY

The engine is warmed up and your Sno-Away is ready to go. You are familiar with the controls, their function and how to set them, so let's survey the job at hand.

ORGANIZING THE JOB

A few seconds spent in organizing the job will cut the total time required greatly.

Remove door mats and any other objects from the area to be cleared. We want to throw the snow downwind as much as possible so start your first pass on the upwind side of the driveway or sidewalk.

TRANSPORTING

Transporting the Sno-Away to the area to be cleared. Shift the transmission control lever into forward (down), push the throttle forward, grasp the handles, and squeeze the clutch grip gently to guide the Sno-Away to the work area. A down pressure on the handles will raise the skid shoes and make the Sno-Away easier to guide. Remember the lock plate should be in the driving position and there is no need to run the auger while transporting.

DETERMINING THROWING DISTANCE

The snow should be deposited beyond the surface you want to clear - if at all possible - so start with the deflector all of the way up and adjust the engine speed so that the thrown snow is deposited beyond the far side of the area to be cleared. If the snow is only a couple of inches deep it may be necessary to go over the ground quite rapidly to feed snow into the auger. In this situation, the deflector should be lowered and the engine speed increased. CAUTION: STOP THE ENGINE WHILE CHANGING THE DEFLECTOR ADJUSTMENT.

THROWING DIRECTION

The chute should be rotated to discharge the snow downwind, not into it.

Always adjust the spout and extension so that you are well out of the path of the snow stream.

CAUTION

CONSTANT INHALATION OF COLD, WET VAPOR IS EXTREMELY INJURIOUS. ON WINDY DAYS HAVE YOUR NOSE AND MOUTH WELL COVERED.

MOVING THE SNOW

LIGHT SNOW

Snow up to 6" deep can usually be cleared in one pass the full width of the machine. Face the Sno-Away into the snow, set the throttle at half speed or more, and pull the auger drive control rod all of the way up. When the auger drive is fully engaged, readjust the engine speed as described under throwing distance.

Squeeze the clutch grip slowly and guide the Sno-Away through the snow. When you come to the end of a pass, push down on the handles and turn the Sno-Away around to make the next pass, alongside of the cleared area - allow about 2" of over-lap into the cleared area. Release the downward pressure on the handles, rotate the chute so the snow stream goes downwind, and squeeze the touch-o-matic clutch for the second pass. Repeat these steps until the area is cleared.

HEAVY DEEP SNOW

With very dense snow or snow deeper than the center of the auger, a different method is necessary.

FIRST PASS

Lower the deflector about half way and run the engine at full speed. Push down on the handles until the top of the auger housing is above the top of the snow. Squeeze the clutch grip gently, and "inch" through the snow. (Readjust the deflector if necessary to obtain the desired throwing distance. Remember to stop the engine before adjusting the deflector). At the end of the pass turn around as described under light snow except go back over the same path with the no down pressure on the handles.

SUBSEQUENT PASSES

Use the same procedure as light snow, but substantially increase the overlap into the cleared area. In other words, take a narrower slice of snow than the width of the auger housing.

Judge how wide a "slice" to take by watching the snow stream - it should continue to flow freely from the chute - if it doesn't - squeeze the trigger less or take a narrower slice of snow. Any time snow stops flowing freely from the spout, use reverse to back away until the Sno-Away clears itself and then inch into the snow. You will soon get the "feel" of how fast to go and how wide a slice to take.

FOREIGN OBJECT IN THE AUGER OR PLUGGED CHUTE

If the auger stalls or the chute plugs, push the auger drive control down IMMEDIATELY. Pull the speed control all of the way back to stop the engine, and remove the foreign object or spout blockage. CAUTION: Always stop the engine before working near or on the auger or spout.

SHUT DOWN AND STORAGE

After the clearing job is finished the Sno-Away should be transported to a sheltered area.

Set the transmission lever and auger drive control in the neutral position and run the engine at slow speed for about 5 minutes to melt and dry up the snow in hidden areas of the Sno-Away to prevent icing. CAUTION: DO NOT RUN ENGINE IN AN ENCLOSED AREA.

Allow the Sno-Away to cool about 5 minutes and fill the fuel tank to reduce condensation during storage.

Icing during storage will be reduced if the Sno-Away can be stored in a garage or other similar shelter. A storage cover will protect your Sno-Away if it must be stored out of doors.

SUMMER STORAGE

Your engine owners manual and the maintenance section of this manual cover the details of preparation for extended storage. Here are some additional suggestions.

The engine should be run out of fuel, the crankcase drained and refilled. Remove the spark plug, and pour about 2 tablespoons of oil into the spark plug hole. Crank the engine about 6 pulls and replace the spark plug.

Wash the Sno-Away thoroughly to remove dirt and salt, and wipe it dry. Go over exposed areas with an oily rag or use automotive wax to preserve its appearance.

Your Sno-Away has a unique feature - it can be stored on its front to reduce floor area required by about 40%. The fuel tank must be empty but the oil need not be drained for storage in this position.

TROUBLE SHOOTING

IF ENGINE FAILS TO START, check the following:

1. Throttle must be 1/2 open.

2. Choke lever must be in "CHOKE" position or in "OFF" position if engine appears to be flooded.

3. Shift lever must be in "Neutral".

4. Auger control lever must be down (disengaged).

5. Spark plug cable must be securely connected.

IF BELT SLIPPAGE OCCURS, check the following:

1. Belts may be stretched or excessively worn.

2. Pulleys may be greasy or oily.

3. Insufficient belt tension (See "Adjustments").

4. Auger may be clogged. Stop engine before cleaning.

IF A BELT BREAKS, check the following:

1. Look for sharp edges or rough spots on pulleys.

2. Pulleys may be misaligned.

3. Belt tension may be too tight (See "Adjustments").

4. Auger may be blocked by a foreign object or snow. Stop engine before cleaning.

IF GENERAL PERFORMANCE SEEMS UNSATISFACTORY, check the following:

1. Controls or drive system may be out of adjustment (See "Adjustments" and "Maintenance").

2. Extremely wet and heavy snow. See "Operation". Run at full throttle and in successive passes.

3. Belt slippage. See "Adjustments",

4. Low discharge capacity due to insufficient auger speed. See "Operation" and run at full throttle.

5. Lack of traction. Install tire chains for greater traction.

If the trouble cannot be corrected by following the instructions above, see your Simplicity dealer for assistance.

ADJUSTMENTS

WARNING: ENGINE MUST BE STOPPED.

BELT ADJUSTMENTS

1. Remove the belt guard at the left side of the engine by unscrewing the wing bolts. Inspect the engine pulley belt stop fingers to be sure they do not touch the belts when the idler pulleys are engaged. Engage the auger drive idler pulley by pulling the blower control handle up. Engage the traction drive idler pulley by squeezing the clutch grip. Loosen the stop mounting bolts to adjust finger position. There must be 1/16 inch clearance visible between the belts and the fingers. See Figure 22.

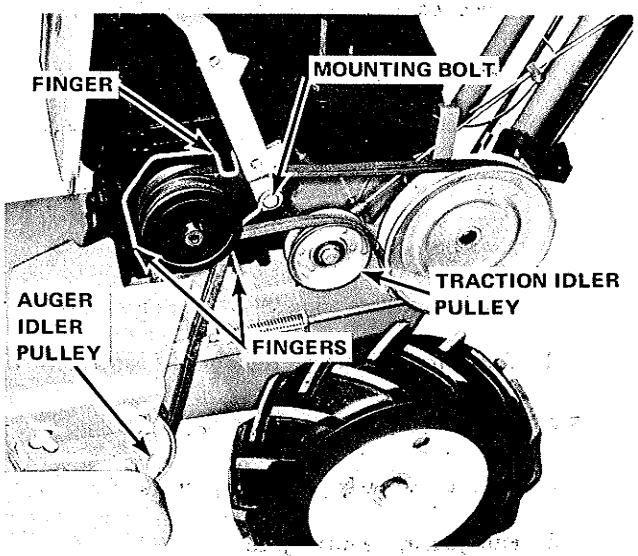


Figure 22.

2. Belt tension for the auger drive is regulated by the position of the set collar on the Blower Control clutch rod. With the Auger Control clutch rod lever engaged, there should be 1/2 inch clearance between the collar and the front ear of the rod bracket. Loosen the square-head set-screw to position the stop collar. See Figure 23.

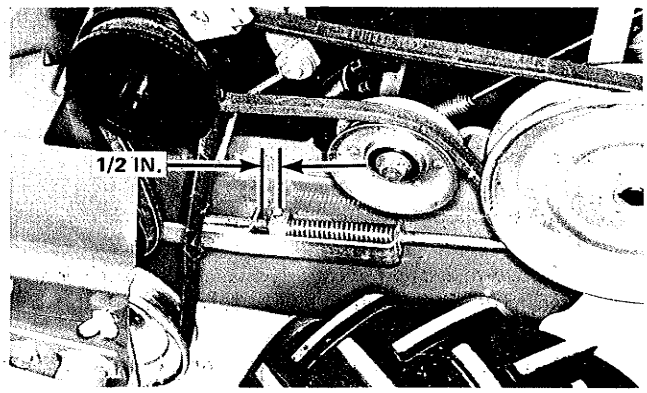


Figure 23.

3. Adjust the Clutch control engagement at the control wire clamp. Initial adjustment of the Clutch Grip control engagement may be made by placing the clamp next to the L bend on the lower connecting wire and pulling up on the lower wire and down on the upper wire also placed through the clamp, until there are 3 to 3-¼ inches from the end of the top wire to the clamp. If necessary, further adjustment can be made by increasing or decreasing the above mentioned distances. See Figure 24.

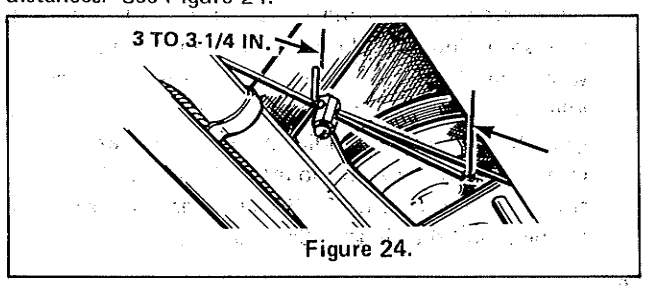


Figure 24.

CHAIN ADJUSTMENT

Chain is properly adjusted when all slack is out of the chain. Loosen, but do not remove chain guard. Pull back on bearing housing until all slack is removed from chain. Be sure bearing housing remains parallel to the auger housing so that the sprocket and pulley are properly aligned. Retighten hardware. See Figure 25.

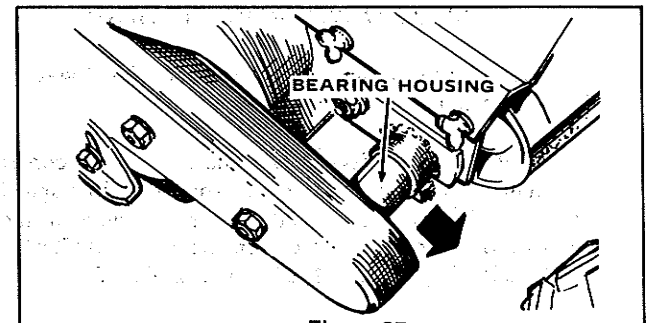


Figure 25.

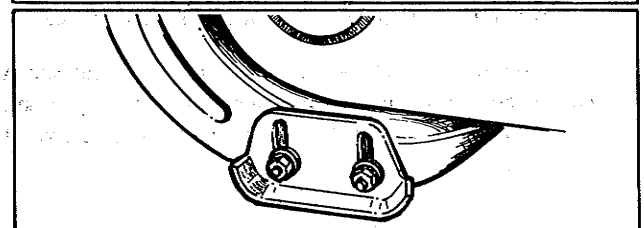


Figure 26.

4. Adjust the auger housing side skid shoe height to suit the type of surface to be cleared. For moving across gravel or crushed stone, loosen the mounting nuts and lower the shoes to raise the housing scraper bar. Retighten the nuts securely. Be sure both shoes are at equal height. For clearing smooth pavement, raise the shoes to allow the scraper bar to rest on the ground. See Figure 26.

MAINTENANCE

LUBRICATION: There are four grease fittings, located on the following:

1. Axle drive housing (right side).
2. Axle shaft.
3. Traction drive pulley shaft.
4. Auger drive pulley shaft.

Apply general purpose automotive grease to all fittings every 15 hours of operation. See Figures 27 & 28.

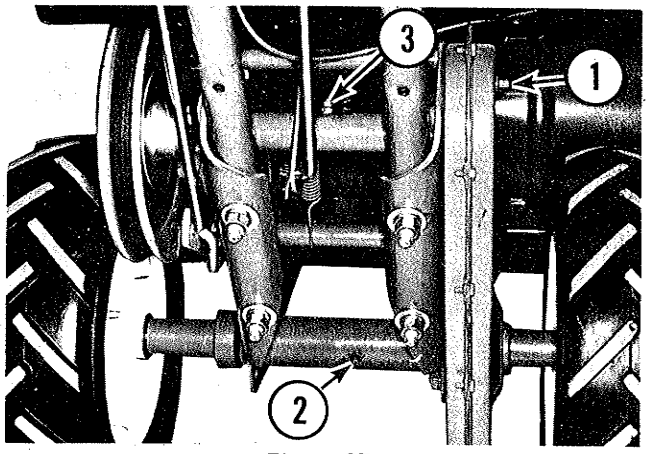


Figure 27.

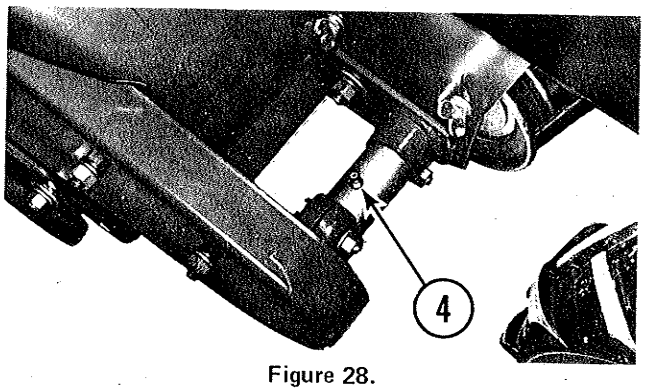


Figure 28.

ENGINE CRANKCASE: See the engine manual. Drain the crankcase by removing the square-head plug from the elbow on the rear lower side of the engine. Change oil every 25 hours of operation. Refill the crankcase to the top of the filler neck with 5W-20 grade MS motor oil. See Figure 29.

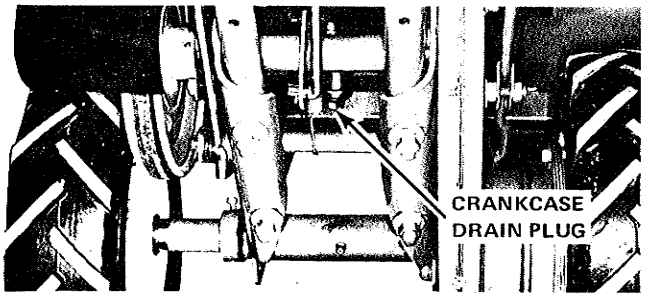


Figure 29.

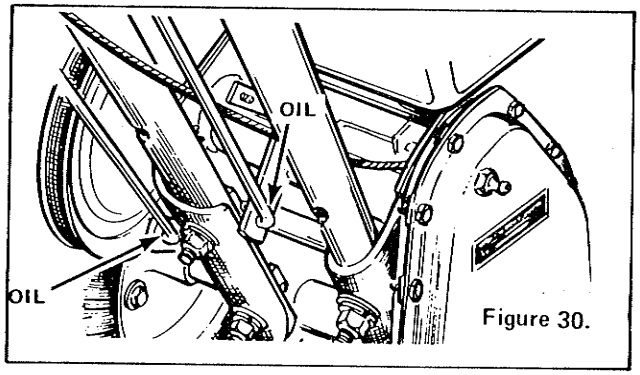
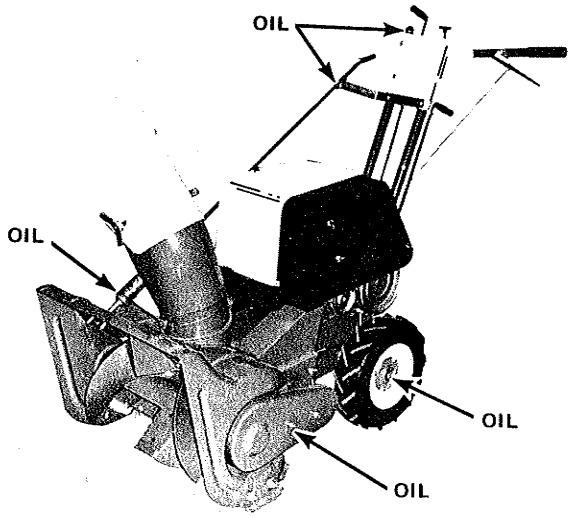


Figure 30.

AUGER CONTROL AND SHIFT RODS AND LINKAGES, CLUTCH ROD AND IDLER PULLEY PIVOT POINTS.

GENERAL LUBRICATION: Apply light motor oil occasionally at the points indicated to reduce wear and assure free movement. Keep a light coating of oil on the auger drive roller chain. See Figures 30 & 31.

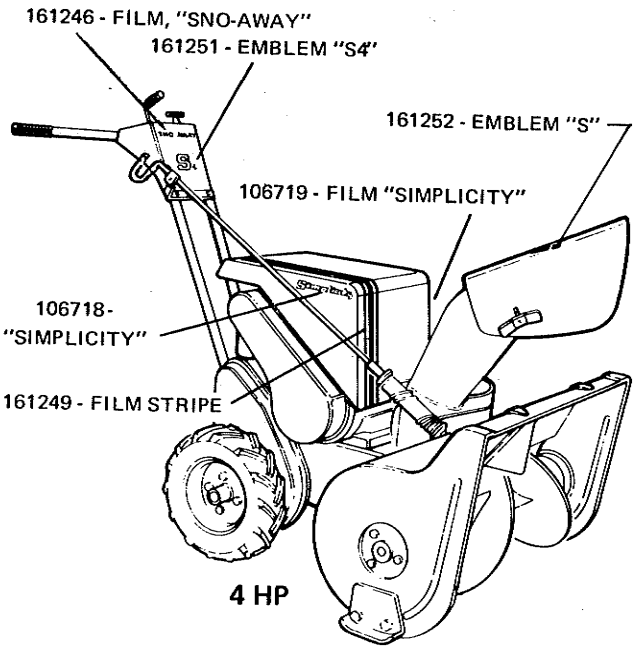


HAND CONTROLS, DISCHARGE SPOUT LINKAGE, AXLE ENDS AND AUGER DRIVE CHAIN.

Figure 31.

GENERAL REPAIRS: To prevent rusting, sand off and paint any parts or areas which become chipped or damaged. Tighten all fasteners and guards securely. Use a wire brush to clean the auger drive roller chain before re-oiling.

DECALS



161247 - DECAL, "SAFETY"
161278 - FILM, ROTOR INSTRUCTIONS
161254 - FILM, INSTRUCTIONS
161107 - DECAL, CONTROL

4 H.P. SINGLE STAGE SNOW-AWAY SPECIFICATIONS

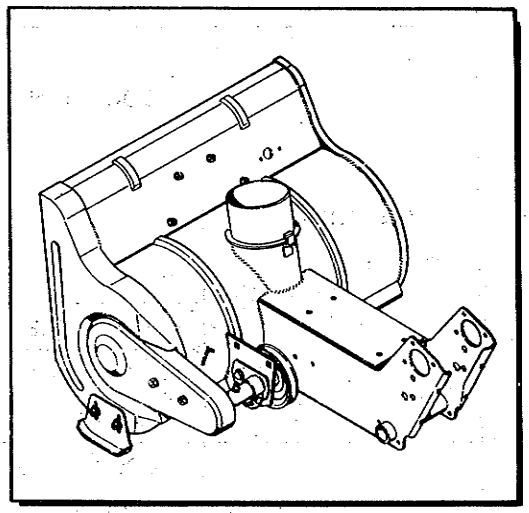
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

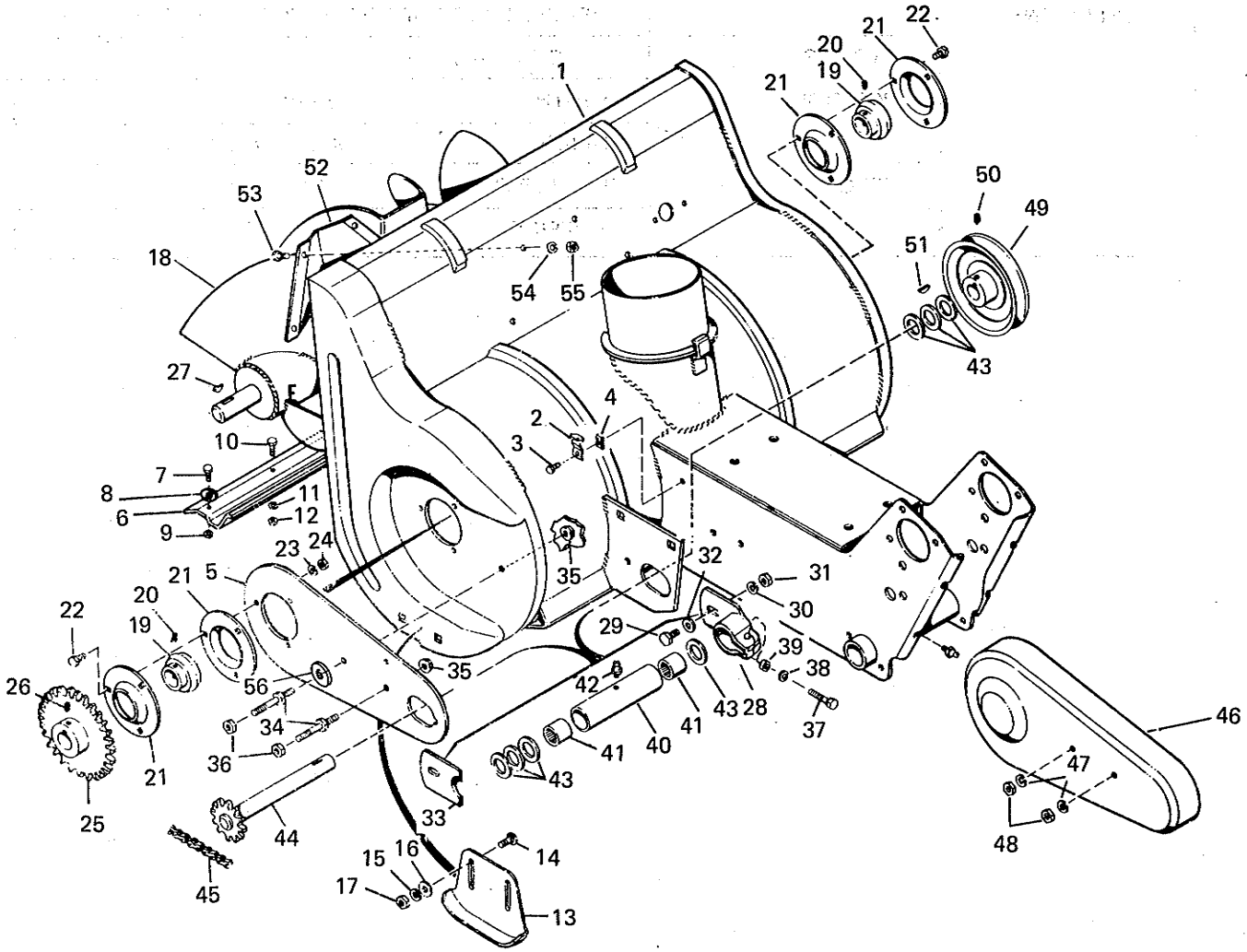
ENGINE	MAKE: BRIGGS & STRATTON	MODEL NO. 100202 TYPE NO. 0180-01
		CYCLES: 4
		CYLINDERS: 1
		CRANKSHAFT PLANE: Horizontal
	STARTER	Recoil, Easy Spin
	CHOKE	Manual
	GOVERNOR	Remote Controlled Mechanical-Range 1800-3400 RPM
	IGNITION	High Tension Magneto
	LUBRICATION	TYPE: Splash
		CRANKCASE CAPACITY: 1-¼ Pints
	FUEL CAPACITY	3 Quarts
	MUFFLER	Quiet, Low Back Pressure
	HOUSING	Winterized
TRACTION DRIVE TRANSMISSION	TYPE	All Gear
	SPEEDS	One Forward, One Reverse 1.39 MPH at 3600 RPM
	CLUTCH	Touch-O-Matic, V-Belt Type
	AXLE	Solid with Free-Turn Lock
	TIRES	SIZE: 3.50 x 6
		TYPE: Zero Pressure, Keyed
AUGER AND HOUSING	AUGER	DIAMETER: 14 Inches
		DRIVE TYPE: Belt and Roller Chain
		CONSTRUCTION: Solid Flite, Welded Steel
	CLUTCH	TYPE: V-Belt Idler
		PROTECTION: Cushioning Belt
	HOUSING	CONSTRUCTION: Welded Steel
		OPENING HEIGHT: 19 Inches
		EFFECTIVE WIDTH 21 Inches
		FRONT SUPPORT: Adjustable, Hardened, Large Area Skid Shoes
		SCRAPER BAR: Full Width, High Carbon Steel

4 H.P. SINGLE STAGE SNOW-AWAY SPECIFICATIONS (Continued)

CONTROLS	LOCATION	SPOUT: Tee Handle Adjustment To Right Handle
		AUGER DRIVE: Under Left Handle
		THROTTLE: Control Panel
		TRACTION DRIVE CLUTCH: Left Handle (squeeze)
		TRACTION DRIVE DIRECTION: Control Panel
		TRACTION DRIVE SPEED: Control Panel
	THROTTLE	Freeze-Proof, Wiper Type Bowden Wire
	ADJUSTABLE SPOUT	TYPE: Freeze-Proof Aircraft Type Cable plus "T" Rod
		ROTATION ANGLE 255 Degrees
DIMENSIONS	OPERATING POSITION	OVERALL LENGTH 56-3/4 Inches
		OVERALL WIDTH 23 Inches
		HEIGHT TO TOP OF HANDLES: 37-3/4 Inches
		HEIGHT TO TOP OF DEFLECTOR (UP): 33-1/2 Inches
	STORAGE POSITION	LENGTH: 37-3/4 Inches
		WIDTH 23 Inches
		HEIGHT 56-3/4 Inches
	WEIGHT	NET (DRY) 190 Pounds
		SHIPPING 204 Pounds

ROTOR BODY and FRAME



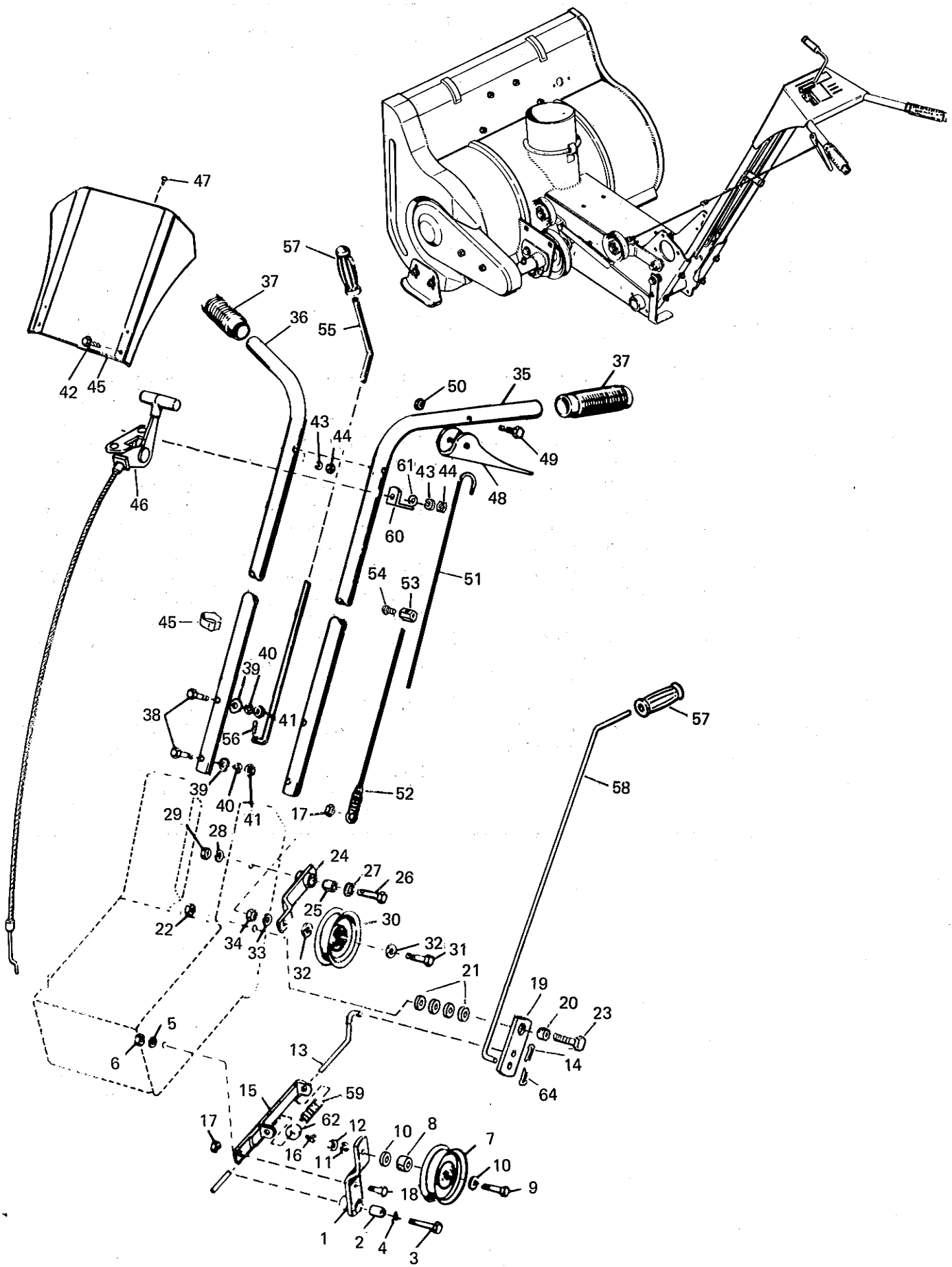


ROTOR BODY and FRAME

Ref. No.	Part No.	Qty.	Description
1	161180	1	BODY-FRAME ASSY.
2	106880	1	CLIP, Speed
3	714006	1	SCREW, Self-tapping, No. 10 x 1/2
4	718008	1	NUT, Speed
5	170754	1	PLATE, Side
6	106831	1	SCRAPER-BODY
7	715071	2	CAPSCREW, Hex, 5/16-18 x 5/8
8	719006	2	WASHER, Flat, 1/4
9	717511	2	NUT, Hex, Full lock, 5/16-18
10	715018	4	CAPSCREW, Hex, 1/4-20 x 5/8
11	720003	4	LOCKWASHER, 1/4
12	717005	4	NUT, Hex, Full, 1/4-20
13	177434	2	SKID
14	703004	4	CARRIAGE BOLT, 3/8-16 x 3/4
15	720002	4	LOCKWASHER, 3/8
16	719001	4	WASHER, Flat, 3/8
17	717003	4	NUT, Hex, Full, 3/8-16
18	106823	1	ROTOR ASSEMBLY
19	106732	2	CARTRIDGE, Bearing
20	713509	2	SETSCREW, 1/4-28 x 1/4
21	161064	4	BEARING, Flange
22	705017	6	CAPSCREW, Hex, 5/16-18 x 3/4
23	720001	6	LOCKWASHER, 5/15
24	717001	6	NUT, Hex, Full, 5/16-18
25	106653	1	SPROCKET, Rotor
26	713503	1	SETSCREW, 5/16-18 x 5/16
27	151040	1	KEY

Ref. No.	Part No.	Qty.	Description
28	176161	1	CLAMP HOUSING
29	705005	1	CAPSCREW, Hex, 3/8-16 x 1
30	72002	1	LOCKWASHER, 3/8
31	717003	1	NUT, Hex full, 3/8-16
32	719001	1	WASHER, Flat, 3/8
33	106825	1	SUPPORT
34	106771	2	STUD
35	718035	2	NUT, Flange, "Whiz-Lock", 3/8-16
36	717510	2	NUT, Hex,Full lock,3/8-16
37	715025	1	CAPSCREW, Hex, 5/16-18 x 1-3/4
38	720001	1	LOCKWASHER, 5/16
39	717001	1	NUT, Hex, Full, 5/16-18
40	106826	1	BEARING HOUSING
41	154258	2	BEARING, Needle
42	727013	1	FITTING, Grease
43	8061012	7	WASHER
44	106827	1	SHAFT ASSEMBLY
45	106058	1	CHAIN
46	170865	1	GUARD, Chain
47	720002	2	LOCKWASHER, 3/8
48	717003	2	NUT, Hex, Full 3/8-16
49	106663	1	PULLEY
50	713503	1	SETSCREW, 5/16-18 x 5/16
51	725003	1	KEY
52	106774	1	DEFLECTOR
53	705012	4	CAPSCREW, Hex, 5/16-18 x 5/8
54	720001	4	LOCKWASHER, 5/16
55	717001	4	NUT, Hex, Full, 5/16-18
56	8161199	1	WASHER, Special

HANDLES and CONTROLS

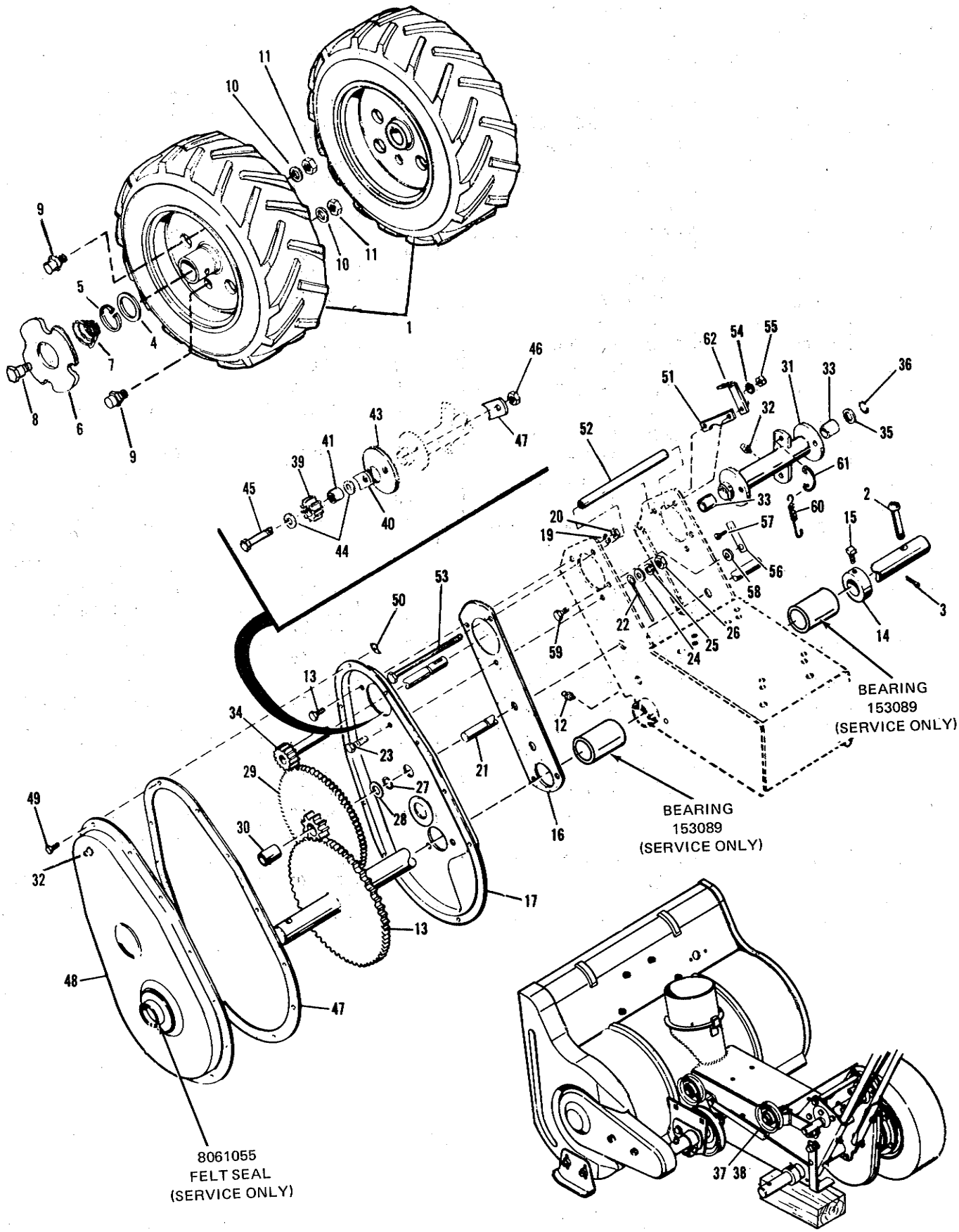


HANDLES and CONTROLS

Ref. No.	Part No.	Qty.	Description
1	1062011	1	IDLER LEVER ASSY.
2	8171073	1	BEARING RACE, Inner
3	705010	3	CAPSCREW, Hex, 3/8-16 x 1-3/4
4	719001	1	WASHER, Flat, 3/8
5	720002	1	LOCKWASHER, 3/8
6	717003	1	NUT, Hex, Full, 3/8-16
7	154534	1	IDLER PULLEY, (Rotor Drive)
8	154177	1	SPACER
9	705010	1	CAPSCREW, Hex, 3/8-16 x 1-3/4
10	719001	2	WASHER, Flat, 3/8
11	720002	1	LOCKWASHER, 3/8
12	717003	1	NUT, Hex, Full, 3/8-16
13	106829	1	ROD, Rotor clutch
14	722001	1	PIN, Cotter, 3/32 x 3/4
15	8081503	1	CLUTCH ROD GUIDE ASSEMBLY
16	713001	1	SETSCREW, Sq. Hd., 1/4-20 x 3/8
17	717510	1	NUT, Hex, Full, Lock, 3/8-16
18	705031	1	CAPSCREW, Hex, 3/8-16 x 7/8
19	161169	1	CLUTCH BAR
20	8161215	1	BUSHING
21	719001	6	WASHER, Flat, 3/8
22	717524	1	NUT, Hex, Full lock, 3/8-26
23	108418	1	CAPSCREW, Special
24	106204	1	IDLER LEVER ASSY.
25	8171073	1	BEARING RACE, Inner
26	705010	1	CAPSCREW, Hex, 3/8-16 x 1-3/4
27	719001	1	WASHER, Flat, 3/8
28	720002	1	LOCKWASHER, 3/8
29	717003	1	NUT, Hex, Full, 3/8-16
30	154534	1	IDLER PULLEY (Trans. Drive)

Ref. No.	Part No.	Qty.	Description
31	705010	1	CAPSCREW, Hex, 3/8-16 x 3/4
32	719001	2	WASHER, Flat, 3/8
33	720002	1	LOCKWASHER, 3/8
34	717510	1	LOCKNUT, Hex, 3/8-16
35	176566	1	HANDLE, L.H.
36	176567	1	HANDLE, R.H.
37	106558	2	GRIP
38	705006	4	CAPSCREW, Hex, 3/8-16 x 2
39	719001	4	WASHER, Flat, 3/8
40	720002	4	LOCKWASHER, 3/8
41	717003	4	NUT, Hex, Full, 3/8-16
42	705025	2	CAPSCREW, Hex, 1/4-20 x 1-1/2
43	720003	2	LOCKWASHER, 1/4
44	717005	2	NUT, Hex, Full, 1/4-20
45	161171	1	HOUSING ASSEMBLY
46	161177	1	THROTTLE CONTROL ASSEMBLY
47	714016	2	SCREW, Hex, Self-tapping, 1/4-20 x 1/2
48	118056	1	GRIP, Clutch
49	705025	1	CAPSCREW, Hex, 1/4-20 x 1-1/2
50	717513	1	NUT, Hex, full lock, 1/4-20
51	161090	1	SPRING, Extension
52	106778	1	SPRING ASSEMBLY
53	161092	1	CLAMP, Wire
54	710006	1	SCREW, Rd. Hd. 10-24 x 3/8
55	161159	1	REVERSE ROD ASSY.
56	722001	1	PIN, Cotter, 3/32 x 3/4
57	106572	2	GRIP, Reverse rod
58	161162	1	ROD
59	8191045	1	SPRING
60	154119	1	CLIP, Spring
61	719006	1	WASHER, Plain, 1/4
62	8191022	1	SET COLLAR
63	722001	1	PIN, Cotter, 3/32 x 3/4

TRANSMISSION and WHEELS

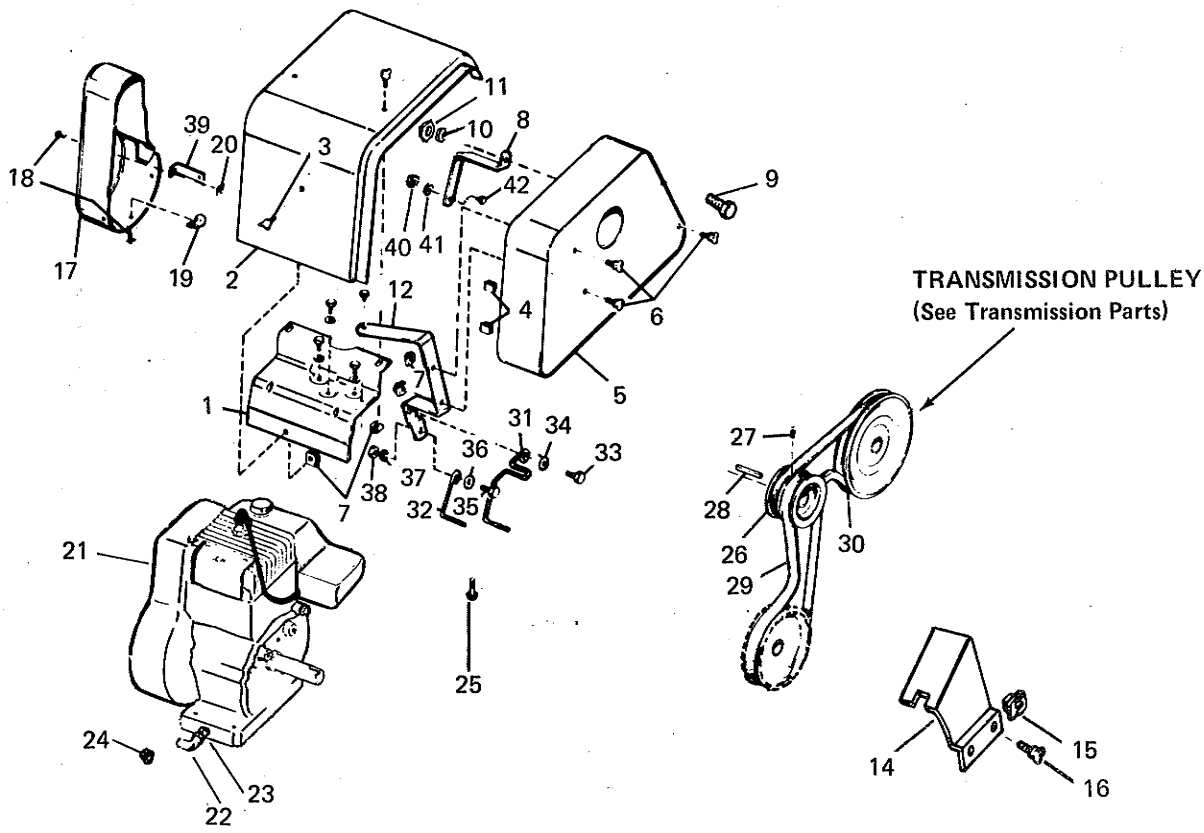


TRANSMISSION and WHEELS

Ref. No.	Part No.	Qty.	Description
1	161161	2	WHEEL & TIRE ASSY.
2	118053	1	PIN
3	8161045	1	CLIP, Spring
4	153088	2	WASHER
5	158396	2	RING, Retaining
6	161168	1	PLATE
7	161176	1	SPRING
8	161166	1	BOLT, Shoulder
9	161167	2	STUD
10	719002	2	WASHER, Plain, 5/16
11	717510	2	NUT, Hex, full lock,3/8-16
12	727002	1	FITTING, Grease
13	161164	1	AXLE & GEAR ASSY.
14	8061046	1	SET COLLAR
15	713006	1	SCREW, Set, Sq. Hd, 5/16-18 x 1/2
16	153114	1	GASKET, Bearing Housing
17	153105	1	GEAR CASE
18	705012	3	CAPSCREW, Hex, 5/16-18 x 5/8
19	720001	3	LOCKWASHER, 5/16
20	717001	3	NUT, Hex, Full, 5/16-18
21	106193	1	SHAFT, Intermediate
22	121044	1	PIN, Lock
23	705005	1	CAPSCREW, Hex, 3/8-16 x 1
24	719001	1	WASHER, Plain, 3/8
25	720002	1	LOCKWASHER, 3/8
26	717003	1	NUT, Hex, Full, 3/8-16
27	153124	1	RING, Retaining
28	153079	1	WASHER
29	121306	1	GEAR ASSY. ,Intermediate
30	156064	1	BUSHING
31	106199	1	HOUSING ASSY., Bearing
32	727002	1	FITTING, Grease
33	8051038	2	BEARING, Bronze

Ref. No.	Part No.	Qty.	Description
34	121115	1	PULLEY SHAFT ASSY.
35	153079	1	WASHER
36	153124	1	RING, Retaining
37	106214	1	PULLEY, Transmission
38	725003	1	KEY, Woodruff, 3/16 x 3/4
39	121118	1	PINION, Reverse
40	121107	1	PINION, Reverse Spacer
41	121163	1	PINION, Spacer
42	121139	1	LOCK PLATE
43	153094	1	SHIELD
44	719002	2	WASHER, Plain, 5/16
45	715033	1	BOLT, Hex, Head, L.H. 3/8-16 x 1-1/2
46	153090	1	NUT, Hex, Full, L.H.
47	153115	1	GASKET, Gear Case
48	153106	1	GEAR CASE COVER ASSEMBLY
49	714004	12	SCREW, Self-tapping, No. 10 x 3/8
50	718008	12	NUT, Speed
51	106215	1	PLATE, Friction, stop
52	106217	1	SPACER, Frame
53	106216	1	BOLT, Frame
54	720001	1	LOCKWASHER, 5/16
55	717001	1	NUT, Hex, Full, 5/16-18
56	718021	1	DETENT, Neutral
57	714014	1	SCREW, Self-tapping,
58	719006	1	WASHER, Plain, 1/4
59	715018	1	CAPSCREW, Hex, 1/4-20 x 5/8
60	153121	1	SPRING, Reverse Lever
61	153011	1	SPRING, Extension
62	106777	1	GUIDE, Clutch Wire

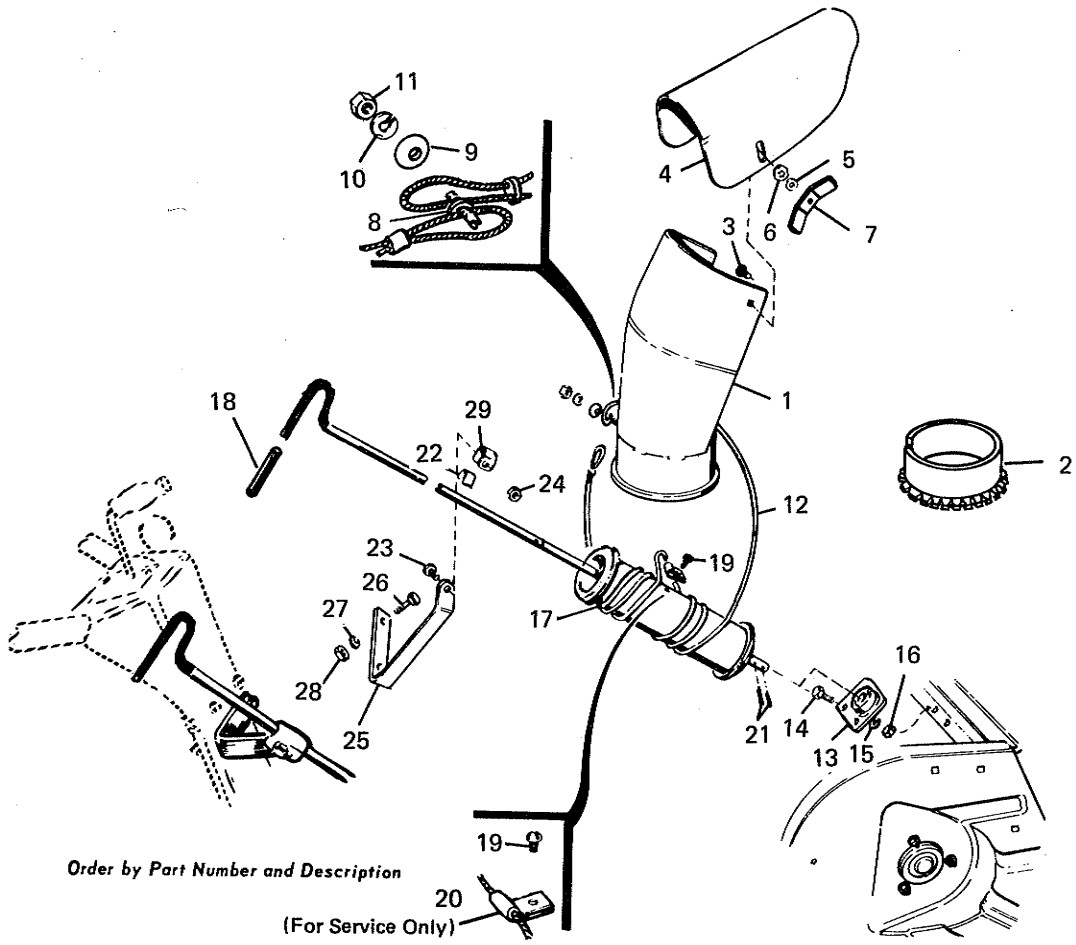
SHIELDS, DRIVE PULLEYS, and ENGINE



Ref. No.	Part No.	Qty.	Description
1	106533	1	BRACKET
2	106534	1	HOOD ASSEMBLY
3	715037	3	THUMBSCREW, 5/16-18 x 3/4
4	106372	3	CLIP, Speed
5	106537	1	BELT GUARD ASSEMBLY
6	715037	3	THUMBSCREW, 5/16-18 x 3/4
7	718030	6	NUT, Tinnerman
8	106540	1	BRACKET, Belt Guard
9	705007	1	CAPSCREW, Hex, 5/16 -18 x 1
10	720001	1	LOCKWASHER, 5/16
11	717001	1	NUT, Hex, Full, 5/16-18
12	106541	1	SUPPORT, Belt Guard
13	714007	1	SCREW, Rec. Hex. Hd., self-tap., 1/4-20 x 3/8
14	106866	1	COVER, Belt
15	718024	2	NUT, Tinnerman
16	715037	2	THUMBSCREW, 5/16-18 x 3/4
17	106590	1	SHIELD, Air Intake
18	714003	5	SCREW, Self-tapping, No. 10 x 1/2
19	718031	4	NUT, Speed, Special
20	718019	1	NUT, Speed, Tinnerman

Ref. No.	Part No.	Qty.	Description
21	106439	1	ENGINE
22	728502	1	ELBOW, Street, 90°
23	106885	1	NIPPLE
24	726502	1	PIPE CAP
25	715081	4	CAPSCREW, Special, 3/8-16 x 1
26	106227	1	PULLEY, Engine
27	713504	2	SETSCREW, Cup Pt., socket hd. 5/16-18x3/8
28	8221042	1	KEY
29	154307	1	V-BELT, (Rotor Drive)
30	8021077	1	V-BELT, (Transmission Drive)
31	106624	1	BELT, Stop
32	106545	1	BELT, Stop
33	706017	1	CAPSCREW, Hex, 1/2-20 x 1
34	721506	1	LOCKWASHER, Int., Shakeproof, 1/2
35	705031	1	CAPSCREW, Hex, 3/8-16 x 7/8
36	719002	1	WASHER, Flat, 5/16
37	720002	1	LOCKWASHER, 3/8
38	717003	1	NUT, Hex, 3/8-16
39	106591	1	BRACKET, Shield
40	717001	1	NUT, Hex
41	720001	1	LOCKWASHER
42	705007	1	CAPSCREW

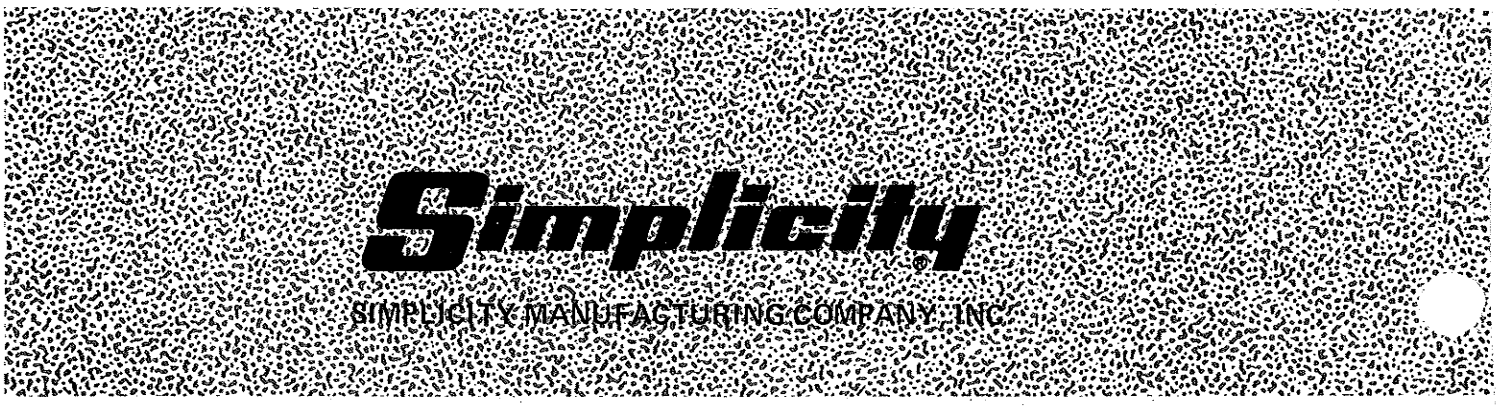
SPOUT GROUP



Order by Part Number and Description

Ref. No.	Part No.	Qty.	Description
1	106762	1	SPOUT ASSEMBLY
2	161280	1	LINER
3	703005	1	BOLT, Carriage, 5/16 -18 x 3/4
4	106760	1	SPOUT EXTENSION
5	719001	2	WASHER, Flat, 3/8
6	721601	2	LOCKWASHER, 3/8
7	106229	2	NUT, Wing
8	719006	1	WASHER, Flat, 1/4
9	171379	1	WASHER, Cup
10	720001	1	LOCKWASHER, 5/16
11	717001	1	NUT, Hex, Full, 5/16-18
12	171362	1	CABLE ASSEMBLY
13	106491	1	BEARING
14	705015	2	CAPSCREW, Hex, 1/4-20 x 5/8
15	720003	2	LOCKWASHER, 1/4

Ref. No.	Part No.	Qty.	Description
16	717005	2	NUT, Hex, Full, 1/4-20
17	176096	1	ROD ASSY., Spout control
18	176934	1	GRIP, Handle
19	715067	1	SCREW, Self-tapping, 1/4-20 x 3/8
20	171382	1	CLAMP
21	722016	2	PIN, Cotter, 3/32 x 5/8
22	121175	1	LINER, Guide
23	705019	1	CAPSCREW, Hex, 5/16-18 x 1-1/4
24	717511	1	NUT, Hex, Full,lock, 5/16-18
25	171357	1	BRACKET, Support
26	705033	2	CAPSCREW, Hex, 1/4-20 x 1-3/4
27	720003	2	LOCKWASHER, 1/4
28	717005	2	NUT, Hex, Full, 1/4-20
29	152050	1	ROD GUIDE


Simplicity®
SIMPLICITY MANUFACTURING COMPANY, INC.